WHAT IS CLAIMED IS:

1.   A device control device comprising:

input information recognition means (2) which recognizes input information to be input;

process-item data storing means (D4) which stores a plurality of process items for executing processes corresponding to recognition information recognized by the input information recognition means (2); and

transition-definition data storing means (D5) which stores plural pieces of transition definition data defining transition from one process item in the plurality of process items to another process item, wherein

each piece of said transition definition data includes a condition corresponding to input information, and

a piece of transition definition data is selected from at least said recognition information and the conditions of the individual transition definition data, and a status is transitioned to a process item designated by the selected transition definition data.

2.   The device control device according to claim 1, wherein said recognized information includes a likelihood (score) between input information and information to be compared, and

said piece of transition definition data is selected using said likelihood (score).

3.   The device control device according to claim 1, wherein when a jump is made from a predetermined process item to a process item or transition definition data which is not defined by transition defining data, transition definition data corresponding to the process item or transition definition data jumped from said predetermined process item is generated.

4.   The device control device according to claim 1, wherein said input information is a speech signal, and

the condition of said transition definition data is a word associated with said transition definition data.

5.   The device control device according to claim 1, wherein a plurality of conditions are set for said transition definition data.

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1   6.   A device control device that stores plural pieces of transition definition

2   data which defines transition from one process item in process items for executing processes

3   corresponding to input information to another process item, selects a piece of transition

4   definition data in accordance with the input information, and transitions a status to a process

5   item designated by the selected piece of transition definition data,

6   wherein said transition definition data includes:

7   a condition corresponding to the input information,

8   a weighting factor corresponding to said condition, and

9   constants each of which is a standard for calculating said weighting factor and

10   set for said transition definition data, and

11   a weighting factor of transition definition data relating to another process item

12   linked to one process item whose status is transitioned is calculated by accumulating said

13   constants from the constant for transition definition data relating to one process item to the

14   constant for transition definition data relating to the another process item.

1   7.   A device control device comprising:

2   input information recognition means (2) which recognizes input information

3   to be input;

4   process-item data storing means (D4) which stores a plurality of process items

5   for executing processes corresponding to recognized information recognized by the input

6   information recognition means (2); and

7   transition-definition data storing means (D5) which stores plural pieces of

8   transition definition data defining transition from one process item in the plurality of process

9   items to another process item, wherein

10   each piece of said transition definition data includes a condition corresponding

11   to input information and a weighting factor corresponding to said condition,

12   said recognized information includes a likelihood (score) indicating a status of

13   matching between said input information and the condition of said transition definition data,

14   said weighing factor is associated with a likelihood (score) corresponding to

15   the condition of said transition definition data to obtain a result of discrimination for the

16   condition of each transition definition data, and

17   a piece of transition definition data is selected based on said discrimination

18   result, and a status is transitioned to a process item designated by the selected transition

19   definition data.

1   8.   The device control device according to claim 7, wherein when a jump

2   is made from a predetermined process item to a process item or transition definition data

3   which is not defined by transition defining data, transition definition data corresponding to

4   the process item or transition definition data jumped from said predetermined process item is

5   generated.

1   9.   The device control device according to claim 7, wherein a transition

2   constant which is a calculation standard for said weighting factor is set as a constant

3   corresponding to said transition definition data, and

4   a weighting factor of transition definition data relating to another process item

5   linked to one process item whose status is transitioned is calculated by accumulating said

6   constants from the constant for transition definition data relating to one process item to the

7   constant for transition definition data relating to the another process item.

1   10.   The device control device according to claim 9, wherein said transition

2   constant changes, provided that transition definition data relating to said transition constant is

3   selected.

1   11.   The device control device according to claim 7, wherein even when a

2   status is transitioned to one process item, a weighting factor of transition definition data

3   relating to a predetermined process item is set higher than a predetermined value.

1   12.   The device control device according to claim 7, wherein said input

2   information is a speech signal, and

3   the condition of said transition definition data is a word subject to speech

4   recognition.

1   13.   The device control device according to claim 7, wherein a plurality of

2   conditions are set for a piece of transition definition data.

1   14.   A device control device that has process-item data storing means (D4)

2   which stores a plurality of process items for executing processes corresponding to recognized

3   information obtained by recognizing input information,

4   defines transition from one process item in the plurality of process items to

5   another process item by transition definition data, and

6   generates a flowchart of process items by adding or deleting said transition

7   definition data in accordance with a link to a necessary process item.

1   15.   The device control device according to claim 14, wherein said process-

2   item data storing means (D4) is constituted in such a manner that a process item can be added

3   adequately.

1   16.   The device control device according to claim 14, wherein each piece of

2   said transition definition data has a condition corresponding to input information.

1   17.   The device control device according to claim 16, wherein said

2   recognized information has a likelihood (score) indicating a status of matching between input

3   information and the condition of said transition definition data, and

4   said likelihood corresponding to the condition of said transition definition data

5   is set for said transition definition data.

1   18.   The device control device according to claim 16, wherein said input

2   information is a speech signal,

3   the condition of said transition definition data is a target word subject to

4   speech recognition,

5   said recognized information includes a likelihood (score) indicating a status of

6   matching between the speech signal and the target word of said transition definition data,

7   said likelihood (score) corresponding to the target word of said transition

8   definition data is set in said transition definition data, and

9   a piece of said transition definition data is selected in accordance with said

10   likelihood (score), and a state is transitioned to a process item represented by said selected

11   piece of transition definition data.

1   19.   The device control device according to claim 14, wherein said

2   transition definition data includes

3   a condition corresponding to input information, and

4   a weighting factor corresponding to said condition.

1   20.   The device control device according to claim 19, wherein a transition

2   constant which is a calculation standard for said weighting factor is set as a constant

3   corresponding to said transition definition data, and

4   a weighting factor of transition definition data relating to another process item

5   linked to one process item whose status is transitioned is calculated by accumulating said

6   constants from the constant for transition definition data relating to one process item to the

7   constant for transition definition data relating to the another process item.

1   21.   A speech recognition device comprising:

2   input information recognition means (2) which recognizes input information

3   to be input;

4   process-item data storing means (D4) which stores a plurality of process items

5   for executing processes corresponding to recognition information recognized by the input

6   information recognition means (2); and

7   transition-definition data storing means (D5) which stores plural pieces of

8   transition definition data defining transition from one process item in the plurality of process

9   items to another process item, wherein

10   each piece of said transition definition data includes a condition corresponding

11   to input information, and

12   a piece of transition definition data is selected from at least said recognition

13   information and the conditions of the individual transition definition data, and a status is

14   transitioned to a process item designated by the selected transition definition data.

1   22.   A speech recognition device comprising a device control device (6)

2   which stores plural pieces of transition definition data which defines transition from one

3   process item in process items for executing processes corresponding to input information to

4   another process item, selects a piece of transition definition data in accordance with the input

5   information, and transitions a status to a process item designated by the selected piece of

6   transition definition data,

7   wherein said transition definition data includes:

8   a condition corresponding to the input information,

9   a weighting factor corresponding to said condition, and

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10   constants each of which is a standard for calculating said weighting factor and

11   set for said transition definition data, and

12   a weighting factor of transition definition data relating to another process item

13   linked to one process item whose status is transitioned is calculated by accumulating said

14   constants from the constant for transition definition data relating to one process item to the

15   constant for transition definition data relating to the another process item.

1   23.   A speech recognition device comprising:

2   input information recognition means (2) which recognizes input information

3   to be input;

4   process-item data storing means (D4) which stores a plurality of process items

5   for executing processes corresponding to recognized information recognized by the input

6   information recognition means (2); and

7   transition-definition data storing means (D5) which stores plural pieces of

8   transition definition data defining transition from one process item in the plurality of process

9   items to another process item, wherein

10   each piece of said transition definition data includes a condition corresponding

11   to input information and a weighting factor corresponding to said condition,

12   said recognized information includes a likelihood (score) indicating a status of

13   matching between said input information and the condition of said transition definition data,

14   said weighing factor is associated with a likelihood (score) corresponding to

15   the condition of said transition definition data to obtain a result of discrimination for the

16   condition of each transition definition data, and

17   a piece of transition definition data is selected based on said discrimination

18   result, and a status is transitioned to a process item designated by the selected transition

19   definition data.

1   24.   A speech recognition device that has process-item data storing means

2   (D4) which stores a plurality of process items for executing processes corresponding to

3   recognized information obtained by recognizing input information,

4   defines transition from one process item in the plurality of process items to

5   another process item by transition definition data, and

6   generates a flowchart of process items by adding or deleting said transition

7   definition data in accordance with a link to a necessary process item.

1   25. An agent device comprising:

2   input information recognition means (2) which recognizes input information

3 to be input;

4   process-item data storing means (D4) which stores a plurality of process items

5 for executing processes corresponding to recognition information recognized by the input

6 information recognition means (2); and

7   transition-definition data storing means (D5) which stores plural pieces of

8 transition definition data defining transition from one process item in the plurality of process

9 items to another process item, wherein

10   each piece of said transition definition data includes a condition corresponding

11 to input information, and

12   a piece of transition definition data is selected from at least said recognition

13 information and the conditions of the individual transition definition data, and a status is

14 transitioned to a process item designated by the selected transition definition data.

1   26. An agent device comprising a device control device (6) which stores

2 plural pieces of transition definition data which defines transition from one process item in

3 process items for executing processes corresponding to input information to another process

4 item, selects a piece of transition definition data in accordance with the input information,

5 and transitions a status to a process item designated by the selected piece of transition

6 definition data,

7   wherein said transition definition data includes:

8   a condition corresponding to the input information,

9   a weighting factor corresponding to said condition, and

10   constants each of which is a standard for calculating said weighting factor and

11 set for said transition definition data, and

12   a weighting factor of transition definition data relating to another process item

13 linked to one process item whose status is transitioned is calculated by accumulating said

14 constants from the constant for transition definition data relating to one process item to the

15 constant for transition definition data relating to the another process item.

1   27. An agent device comprising:

2   input information recognition means (6) which recognizes input information

3 to be input;

4   process-item data storing means (D4) which stores a plurality of process items

5   for executing processes corresponding to recognized information recognized by the input

6   information recognition means (2); and

7   transition-definition data storing means (D5) which stores plural pieces of

8   transition definition data defining transition from one process item in the plurality of process

9   items to another process item, wherein

10   each piece of said transition definition data includes a condition corresponding

11 to input information and a weighting factor corresponding to said condition,

12   said recognized information includes a likelihood (score) indicating a status of

13 matching between said input information and the condition of said transition definition data,

14   said weighing factor is associated with a likelihood (score) corresponding to

15 the condition of said transition definition data to obtain a result of discrimination for the

16 condition of each transition definition data, and

17   a piece of transition definition data is selected based on said discrimination

18 result, and a status is transitioned to a process item designated by the selected transition

19 definition data.

1   28.   An agent device that has process-item data storing means (D4) which

2   stores a plurality of process items for executing processes corresponding to recognized

3   information obtained by recognizing input information,

4   defines transition from one process item in the plurality of process items to

5   another process item by transition definition data, and

6   generates a flowchart of process items by adding or deleting said transition

7   definition data in accordance with a link to a necessary process item.

1   29.   A data structure of transition definition data which defines transition

2   from one process item of a plurality of process items, for executing processes corresponding

3   to input information, to another process item, wherein

4   said transition definition data includes

5   a condition corresponding to input information, and

6   a weighting factor corresponding to said condition,

7   a transition constant which is a calculation standard for said weighting factor

8   is set as a constant corresponding to said transition definition data, and

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9   a weighting factor of transition definition data relating to another process item

10   linked to one process item whose status is transitioned is calculated by accumulating said

11   constants from the constant for transition definition data relating to one process item to the

12   constant for transition definition data relating to the another process item.

1   30.   The data structure according to claim 29, wherein said input

2   information is a speech signal, and

3   the condition corresponding to said input information is a target word for

4   voice recognition.

1   31.   A device control method of a device (2, 6) which stores a plurality of

2   process items for executing processes corresponding to recognized information recognized by

3   input information recognition means (2), and stores plural pieces of transition definition data

4   defining transition from one process item in the plurality of process items to another process

5   item, comprising:

6   an input information recognition step of recognizing input information to be

7   input;

8   a step of selecting a piece of transition definition data from at least recognized

9   information recognized at said input information recognition step, and a condition set in

10   accordance with said transition definition step; and

11   a step of transitioning a status to a process item designated by the selected

12   transition definition data.

1   32.   A device control method comprising:

2   an input information recognition step of recognizing input information to be

3   input;

4   a step of specifying a likelihood (score), which indicates a status of matching

5   between a condition associated with transition definition data defining transition from one

6   process item in a plurality of process items to another process item and said input

7   information, from recognized information recognized at said input information recognition

8   step;

9   a step of obtaining a discrimination result by relating a weighting factor

10   associated with said transition definition data to said likelihood (score);

11   a step of selecting a piece of transition definition data based on said

12   discrimination result; and

13   a step of transitioning a status to a process item designated by the selected

14   transition definition data.

1   33.   A device control method comprising:

2   process-item data storing step of storing a plurality of process items for

3   executing processes corresponding to input information;

4   a step of defining transition from one process item in a plurality of process

5   items to another process item by transition definition data, and generating a flowchart of

6   process items by adding or deleting said transition process data in accordance with a link of a

7   necessary process item.